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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,416	02/19/2002	Mechthild Rieping	218162US0X	2415
22850	7590	11/25/2003		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER KERR, KATHLEEN M	
			ART UNIT 1652	PAPER NUMBER

DATE MAILED: 11/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/076,416	RIEPING ET AL.	
	Examiner	Art Unit	
	Kathleen M Kerr	1652	

-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-22 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Application Status

1. Claims 1-22 are pending in the instant application.

Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
 - I. Claims 1-15, drawn to methods of making amino acids, classified in class 435, subclass 106.
 - II. Claim 16, drawn to an *Enterobacteriaceae* microorganism with an attenuated *poxB* gene and having resistance to α -amino- β -hydroxyvaleric acid, classified in class 435, subclass 252.1.
 - III. Claims 17-18, drawn to strain MG442 Δ *poxB* and plasmid pMAK705 Δ *poxB*, classified in class 435, subclass 252.33.
 - IV. Claim 19, drawn to pMW218*gdhA*, classified in class 435, subclass 320.1.
 - V. Claim 20, drawn to pMW219*rhtC*, classified in class 435, subclass 320.1.
 - VI. Claims 21-22, drawn to polynucleotides comprising SEQ ID NO:4 (a *poxB* deletion mutant gene) and *Enterobacteriaceae* containing said polynucleotides, classified in class 435, subclass 252.1.

3. The inventions are distinct, each from the other because of the following reasons:

Group I is related to Group II as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the

product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case, the process of Group I can be practiced with a materially different product, for example, a cell that is not resistance to α -amino- β -hydroxyvaleric acid – such a product is structurally and functionally different from the product of Group II. Thus, Groups I and II are patentably distinct. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Group I is related to Groups III and VI as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (M.P.E.P. § 806.05(h)). In the instant case, the products of Groups III and VI can be used for a materially different process of using the product, such as in hybridization screens for alternate poxB genes. Thus, Group I is patentably distinct from Groups III and VI. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Group I is related to Groups IV and V by virtue of their disclosure of use together – Examples 5 and 6 in the instant specification. However, Group I does not require the particulars of the products of Groups IV or V to be practiced. Moreover, Groups IV and V can be used in materially distinct processes, such as in the recombinant production of their respectively encoded proteins. Thus, Group I is patentably distinct from Groups IV and V. Because these inventions

are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Group II is related to Group III because MG442 Δ poxB (Group III) has a specifically attenuated poxB gene whose genus is required in Group II. However, Groups II and III are drawn to products that are structurally distinct since Group II also requires resistance to α -amino- β -hydroxyvaleric acid, which is not required in products of Group III. Thus, Groups II and III are patentably distinct. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group III due to the different structural requirements for each Group, restriction for examination purposes as indicated is proper.

Groups II, III and VI are related to Groups IV and V by virtue of their disclosure of use together – Examples 5 and 6 in the instant specification. However, the products of Groups II, III, and VI are wholly distinct from the products of Groups IV and V. Thus, these Groups are patentably distinct. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Group II is related to Group VI because SEQ ID NO:4 (Group VI) has a specifically attenuated poxB gene whose genus is required in Group II. However, Groups II and VI are drawn to products that are structurally distinct since Group II also requires resistance to α -amino- β -hydroxyvaleric acid, which is not required in products of Group VI. Thus, Groups II and VI are patentably distinct. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group VI due to the different structural requirements for each Group, restriction for examination purposes as indicated is proper.

Group III is related to Group VI because the use of the plasmid in Group III (containing SEQ ID NO:3) produces a mutant strain containing a distinct DNA (SEQ ID NO:4) that is Group VI. However, these Groups are distinct because of their distinct structural features, particularly their distinct SEQ ID NOs. Thus, Groups III and VI are patentably distinct. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Notice of Possible Rejoinder

4. The Examiner notes that if product claims in Groups II, III or VI are found directed to an allowable product, then process claims in Group I, which are directed to processes of using the patentable product, previously withdrawn from consideration as a result of a restriction requirement, would now be rejoined pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86; see also M.P.E.P. § 821.04, *In re Ochiai*, and *In re Brouwer*). Since process claims would be rejoined and fully examined for patentability under 37 C.F.R. § 1.104, Applicants are instructed to amend said claims as deemed necessary according to rejections made against the elected claims.

Election

5. A telephone call was made to Ronald Martin on November 20, 2003 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 C.F.R. § 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(i).

Conclusion

6. A complete response to the instant Office action must include an election of invention to be examined.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen M Kerr whose telephone number is (703) 305-1229. The examiner can normally be reached on Monday through Friday, from 9:00am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathupura Achutamurthy can be reached on (703) 308-3804. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

KMK

November 20, 2003

